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PATENT  
Attorney Docket No. 1197-245

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: )  
Ryuichiro Kanatani et al. ) Group Art Unit: 1752  
Application No.: 10/520,417 ) Examiner: John S. Y. Chu  
Filed: January 6, 2005 )  
For: Highly Heat-Resistant, ) Confirmation No.: 5262  
Negative-Type Photosensitive )  
Resin Composition )

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

REPLY

In the Office Action of April 11, 2006, the Examiner rejected claims 1-8 under 35 U.S.C. §103(a) for being obvious over U.S. Patent No. 5,025,088 to Maeda et al. (hereafter Maeda) in view of U.S. Patent No. 6,929,891 to Rushkin et al. (hereafter Rushkin).

Applicants' invention relates to a negative type photosensitive resin composition. When the claimed composition is subjected to exposure, a photopolymerization initiator generates radicals, which bring about radical photopolymerization between a polyimide precursor or a polybenzoxazole precursor having an unsaturated double bond and a monomer having an unsaturated bond, thereby forming a polymer insoluble in a developer. The polymer is then subjected to development and a heat cyclization treatment to form a cured product having improved heat resistance and chemical resistance due to crosslinking of a melamine resin within the structure of the product.